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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,625	02/06/2002	Isaac Wingfield	JNP-0195	3231

26615   7590   11/07/2005

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EXAMINER
PHAN, MAN U

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/072,625	WINGFIELD, ISAAC
	Examiner	Art Unit
	Man Phan	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 February 2002</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2,18-20,22,29,30 and 32</u> is/are rejected.

7)☒ Claim(s) <u>3-17,21,23-28 and 33-39</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   The application of Wingfield for the "Method and apparatus for modifying the rate of

MPEG transport streams" filed 02/06/2002 has been examined. This application claims Priority

from Provisional Application 60301232 filed June 26, 2001. Claims 1-39 are pending in the

application.

Claim Rejections - 35 USC ' 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
>
> in section 102 of this title, if the differences between the subject matter sought to be patented and the
>
> prior art are such that the subject matter as a whole would have been obvious at the time the invention
>
> was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability
>
> shall not be negatived by the manner in which the invention was made.

3.   Claims 1, 18-20, 22 and 29-30, 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sato et al. (US#5,566,174) in view of Fimoff et al. (US#5,905,732).

    With respect to claims 19-20, 22 and 29-30, 32, Sato et al. (US#5,566,174) and Fimoff et

al. (US#5,905,732) disclose a novel system and method for controlling the rate of MPEG

transport streams, according to the essential features of the claims. Sato disclose in Fig. 6 a

block diagram illustrated a remuxing system comprising a timing information altering

mechanism configured to alter timing information in the packets (*Each PCR value in the*

transport packet transmitted by the MUX is modified in a PCR restamper 50) (Col. 6, lines 29 plus), a FIFO capable outputting packets at the payload rate (Fig. 7, Col. 9, lines 66 plus). Sato further teaches the transfer mechanism in forwarding a packet utilizing null packets generator 49 (Col. 6, lines 50 plus).

However, Kennedy does not disclose expressly a one-packet buffer accepting MPEG packet one packet at a time. In the same field of endeavor, Fimofft et al. (US#5,905,732) discloses an MPEG 2 transport stream multiplex system that corrects the PCR packet time base utilizing one-packet buffer. The purpose of the one packet buffer 37 is to allow time for the PCR packet extraction, correction and replacement. Fig. 6 illustrated a simplified block diagram of the PCR restamper, in which the plurality of FIFOs 12-42 supply MPEG data packets (including PCR packets) to the common multiplex data stream 75, via a one packet buffer 37, to the A input of a selector 39. The buffer 37 introduces a one packet delay so that the PCR time base may be extracted by a PCR extractor 38, corrected as will be seen, and inserted in the PCR packet as the PCR packet is being sent out on the common data stream 75. It should be noted that all of the data packets pass through buffer 37 and selector 39, but only the PCR packets are modified (Col. 8, lines 66 plus).

Regarding claims 1,18, they are method claims corresponding to the system claims 19-20, 22 and 29-30, 32 above. Therefore, claims 1, 18 are analyzed and rejected as previously discussed with respect to claims 19-20, 22 and 19-30, 32.

One skilled in the art would have recognized the need for modifying the rate of MPEG transport streams, and would have applied Fimoff's teaching of the one-packet buffer in PCR restamper into Sato's novel use of the remixing schem,e for MPEG transport streams.

Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Fimoff's PCR restamper into Sato's MPEG information signal conversion system with the motivation being to provide a method and system for controlling the rate of MPEG transport streams.

Allowable Subject Matter

4. Claims 2-17, 21, 23-28 and 31, 33-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest wherein forwarding any non-discarded MPEG packets and stuffing packets, if any, into a FIFO outputting packets at the payload rate, the forwarding achieved after the altering of timing information; temporarily storing each MPEG packet from the MPEG transport stream in a one packet buffer prior to forwarding, and prior to altering, inserting and discarding, waiting until the one-packet buffer contains a complete one of the MPEG packet, as recited in claims 2, 3; wherein the first condition includes the FIFO having less packets than the watermark the instant one packet buffer contains a complete MPEG packet, wherein second includes the FIFO having more packets than the watermark the instant one packet buffer contains a complete MPEG packet, as recited in claims 21, 23, 31, 33; wherein the timing information altering mechanism includes a mechanism to test for packets carrying timing information, the mechanism to test coupled to one packet buffer, a mechanism to determine the amount by which the timing information should be altered, the mechanism to determine coupled to the FIFO, and a mechanism to perform arithmetic on the

timing information by the amount, the mechanism to perform coupled to the mechanism to

determine, as specifically recited in claims 24 and 34.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

The Pinder et al. (US#6,219,358) is cited to show the adaptive rate control for insertion of

data into arbitrary bit rate data streams.

The Thompson (US#5,881,245) is cited to show the method and apparatus for

transmitting MPEG data at an adaptive data rate.

The Jeon (US#6,912,218) is cited to show the MPEG transport stream encoder and

method for encoding MPEG transport stream.

The Eyer (US#2002/0118679) is cited to show the efficient transport of program clock

reference for audio services delivered on a MPEG-2 transport stream.

The Zaun et al. (US#2001/0024456) is cited to show the MPEG re multiplexer having

multiple inputs and multiple outputs.

The Chen et al. (US#5,917,830) is cited to show splicing compressed packetized digital

video streams

The Knutson et al. (US#6,788,710) is cited to show the auxiliary data insertion in a

transport data stream.

The Michener (US#6,744,789) is cited to show the system and method for translating

MPEG packets which include PCR data into direct TV packets which include RTS data.

The Yamashita (US#6,097,739) is cited to show the data transfer rate control method and data transfer rate controller.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.
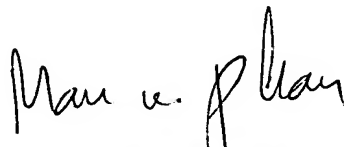
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

7.· Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan
11/02/2005.

MAN U. PHAN
PRIMARY EXAMINER